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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/997,810	11/30/2001	Mark J. Halstead	EMS-02301	6622

26339 7590 08/28/2003

PATENT GROUP  
CHOATE, HALL & STEWART  
EXCHANGE PLACE, 53 STATE STREET  
BOSTON, MA 02109

EXAMINER

PEYTON, TAMMARA R

ART UNIT PAPER NUMBER

2182

DATE MAILED: 08/28/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Applicant N .

Applicant(s)

09/997,810

HALSTEAD ET AL.

Examiner

Art Unit

Tammara R Peyton

2182

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 30 November 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-39 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-39 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                  | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____  |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                         | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) <u>2,5</u> | 6) <input type="checkbox"/> Other:  |

## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

Claims 1-38 are rejected under 35 U.S.C. 102(e) as being anticipated by EP1039387, submitted under Prior Art, paper # 5.

As per claims 1, 2, 7, 9, 13, 14, 19, 21, 25, 26, 31, 34, and 35, EP1039387 teaches creating a communication path between first and second storage devices, comprising:

- creating a connection to a source volume on the first storage device and indicating that the source volume is not ready to transmit data on the communication path;
- after successfully creating the connection to the source volume, creating a connection to a destination volume on the second storage device and initially indicating that portions of one of: the destination volume and the

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source volume do not contain valid copies data, wherein the destination volume accepts data from the source volume; and

- after successful creating the connections to the source and destination volumes, indicating that the source volume is ready to transmit data on the communication path.

EP1039387 teaches creating a communication path via a "create pair command, 211" (col. 5, lines 5-7) between a first logical volume and a second logical volume. After an initial copy is created and the first and second logical volume are not synchronized the status may change to "paired and not copied." During re-synchronization the system will compare the second logical volume data with the first logical volume and determines that the data is invalid and will retransmit all unequal tracks to the second logical volume. (EP1039387, col. 4, lines 51-col. 11, lines 26, See Figs. 1-4)

As per claims 3, 4, 15, 16, 27, 28, 36, and 37, EP1039387 inherently teaches wherein a table containing configuration information (configuration memory) for the first storage device.

As per claims 5, 6, 17, 18, 29, 30, 38, and 39, EP1039387 teaches destroying the connection between the destination and source volume. (col. 5, lines 27-34)

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As per claims 8, 10, 20, 22, and 32, EP1039387 teaches initialing a background copy operation to copy data from the source volume to the destination volume. (col. 5, lines 35-52)

As per claims 11, 12, 23, 24, and 33, EP1039387 teaches that in response to the particular portion being indicated as containing invalid data (unequal tracks), copying data corresponding to the particular portion from the destination volume to the source volume prior to completing the host I/O operation. (col. 5, lines 53-col. 6, lines 1-6)

Claims 1-10 and 25-32 are rejected under 35 U.S.C. 102(e) as being anticipated by *Gagne et al.*, (US 6,209,002), submitted under Prior Art, paper # 5.

As per claims 1, 2, 7, 9, 25, 26, and 31, *Gagne* teaches creating a communication path between first and second storage devices, comprising:

- creating a connection to a source volume (26, 34, Fig. 1) on the first storage device and indicating that the source volume is not ready to transmit data on the communication path (Not Ready command);
- after successfully creating the connection (Reestablish command) to the source volume, creating a connection to a destination volume on the second storage device and initially indicating that portions of one of: the destination volume and the source volume do not contain valid copies

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data (Write Pending/Invalid command), wherein the destination volume accepts data from the source volume; and

- after successful creating the connections to the source and destination volumes, indicating that the source volume is ready to transmit data (Write Command) on the communication path.

*Gagne* teaches creating a communication path between a first logical volume and a second logical volume. *Gagne* teaches wherein the first logical volume is initially 'not ready' to transmit, this prevents a copy program from copying any data to the second logical volume. After a reestablish command is activated, a connection between the first and second logical volume is successfully created. Nonetheless, because of the 'not ready' command portion of the valid copies are not classified as 'invalid' and subsequently be retransmitted via a write command. (*Gagne*, col. 4, lines 4-col. 9, lines 1-61, See Figs. 1-4)

As per claims 3, 4, 27, and 28, *Gagne* inherently teaches wherein a table containing configuration information for the first storage device. (75 and 77, Fig. 1)

As per claims 5, 6, 29, and 30, *Gagne* teaches destroying the connection between the destination and source volume.

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As per claims 8, 10, and 32, *Gagne* teaches initialing a background copy operation to copy data from the source volume to the destination volume.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tammara Peyton whose telephone number is (703) 306-5508. The examiner can normally be reached between 6:30 - 4:00 from Monday to Thursday, (I am off every first Friday), and 6:30-3:00 every second Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jeffrey A. Gaffin, can be reached on (703) 308-3301. The fax phone number for the organization where this application or proceeding is assigned is (703) 305-3718. Any inquiry of a general nature of relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 305-3900.

Mailed responses to this action should be sent to:

Commissioner of Patents and Trademarks

Washington, D.C. 20231.

Faxes for Official/formal communications intended for entry should be sent to:

(703) 746-7238, After Final (703) 746-7239

or, for informal or draft communications, to:

(703) 746-7240 (please label "PROPOSED" or "DRAFT").

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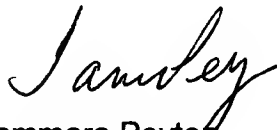
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Hand-delivered responses should be brought to:

Crystal Park II, 2121 Crystal Drive, Arlington, VA, Fourth Floor

(Receptionist).

A handwritten signature in cursive script, appearing to read 'Tammara Peyton'.

Tammara Peyton

August 21, 2003